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PhD in Geosciences / Information processing

WORKING EXPERIENCE

- JUL. 2016 - Postdoctoral fellow, Jet Propulsion Laboratory, CalTech/NASA, USA**
Reconstructing glaciers sea level rise contribution from historical satellite data
- JAN. 2016- Research assistant, University of Edinburgh, UK**
MAY 2016 *Remote sensing of the cryosphere*
- OCT. 2012- PhD student at Université Savoie Mont Blanc, FR**
OCT. 2015 - Research: Laboratoire d'Informatique, Systèmes, Traitement de l'Information et de la Connaissance (LISTIC) , FR / School of Geosciences, University of Edinburgh, UK
Sup.: Noel Gourmelen, Emmanuel Trouvé
Evolution of the Himalaya and Alps glaciers dynamics from 40 years of Earth Observation
- Teaching: IUT Annecy-le-Vieux
Mathematics, Image processing
- SEP. 2011 - Student research project, Collecte Localisation Satellite (CLS), FR**
AUG. 2012 *Development of a sea-turtle population dynamics model.* Sup.: Philippe Gaspar
- MAR. 2011 - Master's project (2nd), Laboratoire des Sciences du Climat et de l'Environnement, FR**
JUN. 2011 *Analysis of the rythm of climate change during the 21st century using CMIP5 simulations.*
Sup.: Sylvie Joussaume
- APR. 2010 - Master's project (1st), Research School of Earth Sciences, ANU, Australia**
AUG. 2010 *Estimation of the Post-Glacial Rebound and Antarctica ice mass balance using gravimetry GRACE data.* Sup.: Paul Tregoning

EDUCATION

- 2012 - 2015 Doctorate – Remote Sensing/Geosciences**
Université Grenoble Alpes, LISTIC (Laboratoire d'Informatique, Systèmes, Traitement de l'Information et de la Connaissance)
- 2010 - 2011 Masters' degree – Ocean, Atmosphere, Climate and Remote Sensing**
Université Pierre et Marie Curie, Paris - with honors
- 2009 - 2010 Master (1st year) – Theoretical and experimental physics**
Ecole Normale Supérieure de Cachan, Université Pierre et Marie Curie - with honors
- 2008 - 2009 Bachelors' degree - Theoretical and experimental physics**
Ecole Normale Supérieure de Cachan, Université Pierre et Marie Curie - with honors

LIST OF PUBLICATIONS

Peer reviewed journals (10)

- [1] **Dehecq A.**, Millan R., Berthier E., Gourmelen N., Trouvé E., Vionnet V. "Elevation changes inferred from TanDEM-X data over the Mont-Blanc area: Impact of the X-band interferometric bias", accepté dans *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, (sortie prévue : Aout 2016).
- [2] Y. Yan, **A. Dehecq**, E. Trouve, G. Mauris, N. Gourmelen, and F. Vernier, "Fusion of Remotely Sensed Displacement Measurements: Current status and challenges," *IEEE Geoscience and Remote Sensing Magazine*, vol. 4, no. 1, pp. 6–25, Mar. 2016.
- [3] Y. Chavaillaz, S. Joussaume, **A. Dehecq**, P. Braconnot, and R. Vautard, "Investigating the pace of temperature change and its implications over the twenty-first century," *Climatic Change*, pp. 1–14, Mar. 2016.
- [4] A. Purcell, P. Tregoning, and **A. Dehecq**, "An assessment of the ICE6G_C(VM5a) glacial isostatic adjustment model," *J. Geophys. Res. Solid Earth*, p. 2015JB012742, Jan. 2016.
- [5] A. J. Tedstone, P. W. Nienow, N. Gourmelen, **A. Dehecq**, D. Goldberg, and E. Hanna, "Decadal slowdown of a land-terminating sector of the Greenland Ice Sheet despite warming," *Nature*, vol. 526, no. 7575, pp. 692–695, Oct. 2015.
- [6] **A. Dehecq**, N. Gourmelen, and E. Trouve, "Deriving large-scale glacier velocities from a complete satellite archive: Application to the Pamir–Karakoram–Himalaya," *Remote Sensing of Environment*, vol. 162, pp. 55–66, Jun. 2015.
- [7] L. Benoit, **A. Dehecq**, H.-T. Pham, F. Vernier, E. Trouvé, L. Moreau, O. Martin, C. Thom, M. Pierrot-Deseilligny, and P. Briole, "Multi-method monitoring of Glacier d'Argentière dynamics," *Annals of Glaciology*, vol. 56, no. 70, pp. 118–128, 2015.
- [8] M. McMillan, A. Shepherd, N. Gourmelen, **A. Dehecq**, A. Leeson, A. Ridout, T. Flament, A. Hogg, L. Gilbert, T. Benham, M. van den Broeke, J. A. Dowdeswell, X. Fettweis, B. Noël, and T. Strozzi, "Rapid dynamic activation of a marine-based Arctic ice cap," *Geophys. Res. Lett.*, vol. 41, no. 24, pp. 8902–8909, Dec. 2014.
- [9] P. Gaspar, S. R. Benson, P. H. Dutton, A. Réveillère, G. Jacob, C. Meetoo, **A. Dehecq**, and S. Fossette, "Oceanic dispersal of juvenile leatherback turtles: going beyond passive drift modeling," *Marine Ecology Progress Series*, vol. 457, p. 265, 2012.
- [10] A. Purcell, **A. Dehecq**, P. Tregoning, E.-K. Potter, S. C. McClusky, and K. Lambeck, "Relationship between glacial isostatic adjustment and gravity perturbations observed by GRACE," *Geophys. Res. Lett.*, vol. 38, no. 18, p. L18305, Sep. 2011.

Peer-reviewed conference papers (3)

- [11] R. Millan, **A. Dehecq**, E. Trouve, N. Gourmelen, and E. Berthier, "Elevation changes and X-band ice and snow penetration inferred from TanDEM-X data of the Mont-Blanc area," in *Analysis of Multitemporal Remote Sensing Images (Multi-Temp), 2015 8th International Workshop on the*, 2015, pp. 1–4.
- [12] **A. Dehecq**, E. Trouve and N. Gourmelen, "Determination of glacier velocities at a large spatial scale from optical satellite archives" *International Geoscience and Remote Sensing Symposium (IGARSS)*. Institute of Electrical and Electronics Engineers Inc., p. 4014-4017 4 p. 6947366
- [13] **A. Dehecq**, N. Gourmelen, A. Shepherd, R. Cullen, E. Trouve, "Evaluation of CryoSat-2 for height retrieval over the Himalayan range", *Proceeding of the 3rd CryoSat-2 user workshop, Dresden*, 2013.